

Application of: John E. Johnson
Serial No.: 10/604,306
Amendment C

Amendments to the Drawing.

Please amend the drawing as shown in the attachment to add Fig. 2A to the drawing and to correct item label 502 of Fig. 5. No new matter is added.

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REMARKS

Claims 1-18 are pending in the application. Claims 1-18 stand rejected. The applicant hereby submits the above amendments and the below remarks, which are fully responsive to the Office Action. The applicant respectfully asserts that the claims are in condition for allowance. The applicant requests that the claims as amended proceed to allowance. Please enter the amendments as indicated herein.

The Examiner cites an objection to the drawing for not showing a high pressure nozzle. High pressure nozzles are well known staple items in this art area as well as others and are available in various configurations. The applicant is not required to teach required to teach what is well known by those skilled in the art, however the drawing has been amended to reflect a high pressure nozzle and the specification has been modified to refer to the nozzle as shown in the drawing. No new matter has been added.

The Examiner cites an objection to the drawing for not showing a worm feed line. Fig. 5 does in fact show the worm feed line as well as arrows showing the feed path of the worm feed line as already described in the specification. An item number has been added to the specification to identify the worm feed line. No new matter has been added.

The Examiner cites a rejection to claims 7 and 8 as claiming a combination that is not described in the specification or drawing. However, claims 7 and 8 are method or process claims and merely recite additional steps to the process, which is clearly described in the specification. The spinal cord material can be clean with a bit and vacuum process first and then cleaned with

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the high pressure nozzle and/or chain next. These process steps are clearly described in the specification as embodiments comprising or including these steps.

The applicant agrees that the item label 502 is pointing to the incorrect item and the drawing has been amended as indicated herein. No new matter has been added.

The Examiner rejected claims 7 and 8 under 35 U.S.C. 112 for lack of enablement. However, claims 7 and 8 are method or process claims and merely recite additional steps to the process, which is clearly described in the specification. The spinal cord material can be clean with a bit and vacuum process first and then cleaned with the high pressure nozzle and/or chain next. These process steps are clearly described in the specification as embodiments comprising or including these steps. The process steps can simply be performed one after another. There is no automated process or special machinery necessary to link the steps together other than what is well known in the art. In fact the spinal cord removal process can be performed manually using the bit and/or high pressure nozzle and/or chain as is evident from the prior art.

The Examiner rejects claims 9-13 for lack of written description under 35 U.S.C. 112 indicating that the term semi flexible worm feed is not described. To the contrary, this limitation is described in paragraph [0009] of the specification. In addition, the term semi flexible is a term that is well understood by those skilled in the art as well as the term worm feed. The Examiner further indicates that the limitation relating to retracting and extending is not describe in the specification. To the contrary, this limitation is described in the specification at paragraph [0025], where the cutting bit is retracted in the vacuum casing then extended beyond the vacuum casing.

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The Examiner rejects claim 18 as anticipated by the Japanese reference; however, claim 18 recites: a substantially **hollow tubular cutting blade** implement having an open leading blade end, said leading blade end having **a sharpened circumferential leading edge** about the opening said cutting blade having a **distal open blade base end fixedly attached to** a leading end opening of the leading end. The Examiner identifies items 22, 23, and 24 of the Japanese reference, which clearly does not anticipate, teach or suggest a **hollow tubular cutting blade** having **a sharpened circumferential leading edge**.

The Examiner rejects claims 1 and 3 – 6 under 35 U.S.C. 103 based on the German reference in view of Esbroeck. Primarily, item 46 of Esbroeck is not a cutting bit as seen in Fig. 5 of the drawing and in the specification at Col. 8, Lines 1 – 5. Item 46 is the rounded edge of the mandrel. Further, item 44 is not a vacuum casing, but is an outer cutter. The references cited by the Examiner does not teach or suggest all the limitations of the invention as claimed. Specifically, the relationship and operation of the mandrel, the cylindrical cutter and the bow-shaped cutters lying along the inner periphery of the mandrel is described in the specification at Col 4, which does not teach or suggest rotatable shaft that is adapted to retract the cutting bit back within the vacuum casing and extend through the vacuum casing extending the cutting bit forward beyond the vacuum casing.

The Examiner rejects claim 2 under 35 U.S.C. 103 based on the German reference in view of Esbroeck and Youman. These references do not teach or suggest all the limitation of claim 2 for the same reasons discussed above for claim 1 from which claim 2 depends.

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The Examiner rejects claim 7 under 35 U.S.C. 103 based on the German reference in view of Esbroeck and Post. Primarily Post does not disclose inserting a feed line at 13, please see Post at Col 7, Lines 55 – 65. Post teaches an apparatus and method for operating on a half carcass. The items 13 – 23 discussed by the Examiner act as a guide means for the spinal column, specifically item 13 acts as a guide in one plane and item 14 forms a side guide as clearly described in the specification. These elements recited by the Examiner are totally unrelated to insertion through the spinal channel.

The Examiner rejects claim 8 under 35 U.S.C. 103 based on the German reference in view of Esbroeck and a second German reference. These references do not teach or suggest, retracting in and extending through said vacuum casing as argued above.

The Examiner rejects claims 9 – 10 and 12 under 35 U.S.C. 103 based on the Post in view of Baraut. Primarily Post does not disclose inserting a feed line at 13, please see Post at Col 7, Lines 55 – 65. Post teaches an apparatus and method for operating on a half carcass. The items 13 – 23 discussed by the Examiner act as a guide means for the spinal column, specifically item 13 acts as a guide in one plane and item 14 forms a side guide as clearly described in the specification. These elements recited by the Examiner are totally unrelated to insertion through the spinal channel. Further, Baraut is clearly non-analogous art and there is know motivation in any of the references cited to combine the two.

The Examiner rejects claims 11 and 13 under 35 U.S.C. 103 based on the Post in view of Baraut. The same argument is applicable as made for claims 9 and 12 above.

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The Examiner rejects claims 14 and 17 under 35 U.S.C. 103 based on the German reference in view of Esbroeck. Primarily, item 46 of Esbroeck is not a high pressure nozzle as seen in Fig. 5 of the drawing and in the specification at Col. 8, Lines 1 – 5. Item 46 is the rounded edge of the mandrel. Further, item 44 is not a vacuum casing, but is an outer cutter. The references cited by the Examiner do not teach or suggest all the limitations of the invention as claimed. Specifically, the relationship and operation of the mandrel, the cylindrical cutter and the bow-shaped cutters lying along the inner periphery of the mandrel is described in the specification at Col 4, which does not teach or suggest rotatable shaft that is adapted to retract the high pressure nozzle back within the vacuum casing and extend through the vacuum casing extending the cutting bit forward beyond the vacuum casing.

Independent claims 1, 6, 8, 14 and 17 recite a limitation for a rotatable shaft adapted to retract the cutting bit or cutting nozzle within the vacuum casing and extend beyond the vacuum casing. Independent Claim 12 recites a limitation for a semi flexible worm feed and a spiral spring cutting head where the spiral spring varies in diameter. Independent Claim 18 recites a limitation that the blade is fixedly attached. The references cited herein taken individually or in combination do not anticipate, teach or suggest these limitations.

The applicant respectfully requests that claims 1 – 18 as amended be allowed and proceed to issuance. If any issue regarding the allowability of any of the pending claims in the present application could be readily resolved, or if other action could be taken to further advance this application such as an Examiner's amendment, or if the Examiner should have any questions

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regarding the present amendment, it is respectfully requested that the Examiner please telephone
Applicant's undersigned attorney in this regard.

Date: Oct 14, 2003

Respectfully submitted,



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